

## EMERGENT CONTENT CONTAINERS

### CROSS REFERENCE TO RELATED APPLICATIONS

**[0001]** This application claims priority to U.S. provisional patent application No. 62/679,551, filed on Jun. 1, 2018, and U.S. non-provisional patent application Ser. No. 16/429,808, filed on Jun. 3, 2019, which are hereby incorporated by reference in their entireties.

### TECHNICAL FIELD

**[0002]** The present disclosure generally relates to instantiating objective-effectuators in emergent content containers.

### BACKGROUND

**[0003]** Some devices are capable of generating and presenting computer-generated reality (CGR) environments. Some CGR environments include virtual environments that are simulated replacements of physical environments. Some CGR environments include augmented environments that are modified versions of physical environments. Some devices that present CGR environments include mobile communication devices such as smartphones, head-mountable displays (HMDs), eyeglasses, heads-up displays (HUDs), and optical projection systems. Most previously available devices that present CGR environments are ineffective at presenting representations of certain objects. For example, some previously available devices that present CGR environments are unsuitable for presenting representations of objects that are associated with an action.

### BRIEF DESCRIPTION OF THE DRAWINGS

**[0004]** So that the present disclosure can be understood by those of ordinary skill in the art, a more detailed description may be had by reference to aspects of some illustrative implementations, some of which are shown in the accompanying drawings.

**[0005]** FIGS. 1A-1P are diagrams of an example user interface in accordance with some implementations.

**[0006]** FIG. 2 is a block diagram of an example system in accordance with some implementations.

**[0007]** FIG. 3A is a block diagram of an example emergent content engine in accordance with some implementations.

**[0008]** FIG. 3B is a block diagram of an example neural network in accordance with some implementations.

**[0009]** FIGS. 4A-4B are flowchart representations of a method of instantiating objective-effectuators in emergent content containers in accordance with some implementations.

**[0010]** FIG. 5 is a block diagram of a server system enabled with various components of the emergent content engine in accordance with some implementations.

**[0011]** In accordance with common practice the various features illustrated in the drawings may not be drawn to scale. Accordingly, the dimensions of the various features may be arbitrarily expanded or reduced for clarity. In addition, some of the drawings may not depict all of the components of a given system, method or device. Finally, like reference numerals may be used to denote like features throughout the specification and figures.

## SUMMARY

**[0012]** Various implementations disclosed herein include devices, systems, and methods for instantiating objective-effectuators in emergent content containers. In various implementations, a device includes a non-transitory memory and one or more processors coupled with the non-transitory memory. In some implementations, a method includes displaying a user interface that includes an objective-effectuator and a first affordance to manipulate the objective-effectuator. In some implementations, the objective-effectuator is characterized by a set of predefined objectives and a set of visual rendering attributes. In some implementations, the method includes instantiating the objective-effectuator in an emergent content container. In some implementations, the emergent content container allows the objective-effectuator to perform actions that satisfy the set of predefined objectives. In some implementations, the method includes displaying a second affordance in association with the emergent content container. In some implementations, the second affordance controls an operation of the emergent content container.

**[0013]** In accordance with some implementations, a device includes one or more processors, a non-transitory memory, and one or more programs. In some implementations, the one or more programs are stored in the non-transitory memory and are executed by the one or more processors. In some implementations, the one or more programs include instructions for performing or causing performance of any of the methods described herein. In accordance with some implementations, a non-transitory computer readable storage medium has stored therein instructions that, when executed by one or more processors of a device, cause the device to perform or cause performance of any of the methods described herein. In accordance with some implementations, a device includes one or more processors, a non-transitory memory, and means for performing or causing performance of any of the methods described herein.

### Description

**[0014]** Numerous details are described in order to provide a thorough understanding of the example implementations shown in the drawings. However, the drawings merely show some example aspects of the present disclosure and are therefore not to be considered limiting. Those of ordinary skill in the art will appreciate that other effective aspects and/or variants do not include all of the specific details described herein. Moreover, well-known systems, methods, components, devices and circuits have not been described in exhaustive detail so as not to obscure more pertinent aspects of the example implementations described herein.

**[0015]** A physical environment refers to a physical world that people can sense and/or interact with without aid of electronic systems. Physical environments, such as a physical park, include physical articles, such as physical trees, physical buildings, and physical people. People can directly sense and/or interact with the physical environment, such as through sight, touch, hearing, taste, and smell.

**[0016]** In contrast, a computer-generated reality (CGR) environment refers to a wholly or partially simulated environment that people sense and/or interact with via an electronic system. In CGR, a subset of a person's physical motions, or representations thereof, are tracked, and, in